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July 9, 2012

**BY HAND DELIVERY**

Marlene H. Dortch, Secretary  
Federal Communications Commission  
Office of the Secretary  
445 12th Street, SW  
Washington, DC 20554

**FILED/ACCEPTED**

**JUL - 9 2012**

Federal Communications Commission  
Office of the Secretary

Re: Request for Clarification Regarding the Beamwidth Technical  
Specification in Waiver Order, FCC 11-85; WT Docket No. 11-202, RM-  
11612

Dear Ms. Dortch:

In the Order<sup>1</sup> granting Trex's request for a waiver to permit certification and use of FOD radar detection equipment operating in the 78-81 GHz band, the Commission included a technical specification for transmit beamwidth (i.e., 0.2 deg). Because of concerns that this parameter either is vague or may be misinterpreted, Trex Enterprises Corporation, by its attorneys, seeks clarification that the technical specification for transmit beamwidth be interpreted as a typical or minimum rather than an absolute value, or alternatively, that beamwidth is not a value that needs to be specified for FOD detection radar operations at airports.

The specification for beamwidth for FOD radar detection equipment only makes sense if read as a typical or minimum value, based on the specified values for transmit power and system EIRP, which are both understood to be maximum, upper limit values and the relevant specifications for limiting potential harmful interference by FOD detection radars. To interpret it as an absolute value is not feasible given the relationship between transmit power, EIRP and

<sup>1</sup> Amendment of the Commission's Rules to Permit Radiolocation Operations in the 78-81 GHz Band; Request by the Trex Enterprises Corporation for Waiver of Section 90.103(b) of the Commission's Rules, *Notice of Proposed Rulemaking and Order*, FCC 11-185, 25 FCC Rcd 17476, 17481 (¶ 18) (2011).

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antenna gain. A typical antenna complying with the EIRP and transmit power upper limits as specified in the waiver would produce a beamwidth of approximately  $1.0 \times 0.4$  degrees. Indeed, for a system operating at even half of the allowed transmit power level of 100 mW, it would be impossible for any antenna to produce a beamwidth of  $1.0 \times 0.2$  degrees and simultaneously comply with the EIRP upper limit as specified.

Moreover, achieving a specific measurement for beamwidth is not a technical requirement in the Part 90 rules. Such specificity matters only when trying to coordinate fixed links that will be located near each other to avoid harmful interference, a situation not applicable with the deployment of FOD detection radar systems.

For these reasons, Trex requests that the Commission either find that the transmission beamwidth value specified in the waiver order or is a typical or minimum value, or alternatively, that beamwidth is not a value that needs to be specified for FOD detection radar operations at airports.

Please contact the undersigned if you have questions.

Respectfully submitted,

Kelley Drye & Warren LLP



Randall W. Sifers

cc: Scot Stone, Deputy Chief  
Mobility Division, Wireless Telecommunications Bureau